SITE NUMBER: CW-R2-02
LOCAL NAME: Morrison
WRIA:

NORTH COAST OFF CHANNEL SITE INVENTORY DATA

RIVER SYSTEM: Clearwater **DATE:** 4/21/88 **OBSERVER**: Nettnin

CHANNEL TYPE: Terrace Tributary

TRIBUTARY TO: Clearwater River (21.0024)

SITE LOCATION: River mile - 2.8 R.B. (Stream catalog)

LEGAL DESCRIPTION:

	UPPER END	LOWER END

DISSOLVED OXYGEN: Not taken this date. See subsquent evaluation.

WATER TEMP.: No temperature data was taken on this date.

AIR TEMP.:

FLOW (CFS): < 0.25 1.0 - 2.0

SUBSTRATE TYPE: Mostly silt. Some gravel in the incised channel below the main pond. Gravel is mostly cemented in a hardpan base.

SITE SIZE: **Length**- 1400 - 1500m (Partially estimated from photos)
Width- Channel width = 2 - 8 ft (excluding ponds)
Depth- Ave. = 12-18" Ponds = 2-4'

WATER SOURCE: Springs and surface run off.

DIRECTIONS TO SITE: Head north on Highway 101. Take first right north of mile post 156. Then see attached map.

FISH ACCESS AND CURRENT USE: Coho have access to the lower and middle reaches and are known to use this system to some extent for winter rearing (See Queets tribe smolt trapping data). The extent of coho use in the mid to upper reaches is unknown.

FLOODING POTENTIAL: Low to moderate.

LANDOWNER: Probably all ITT Rayonier.

COMMENTS & RECOMMENDATIONS: The lower reach of CW-R2-02 (i.e. outlet of the main pond to the river) is deeply incised with 8 to 12 ft banks along a 4 to 8 ft wide channel. The gradient becomes very flat in the mid and upper reaches with the channel offering extensive (though sometimes shallow) pond and marsh habitat. Two significant ponds were identified: the large main pond (Morrison pond) and a small upper pond (see pond data supplements). Access by juvenile coho to the upper reaches appears restricted. It is known that the lower part of the main pond dried up during the summer of 1987. The uppermost reaches may have maintained some water throughout the summer.

Deepening of some of the shallower areas of the main pond could greatly increase the quality and quantity of the winter rearing habitat. Channelization of flows and select debris removal in some of the shallow marsh areas of the mid and upper reaches could insure access to the upper pond.

SITE NUMBER: CW-R2-02
LOCAL NAME: Morrison
RIVER SYSTEM: Clearwater
(Main Pond)

POND DATA SUPPLEMENT

DATE: 4/21/88

INLET **OUTLET**

DISSOLVED OXYGEN: (Not taken this date. See subsequent evaluation)

WATER TEMPERATURE: (Not taken this date. See subsequent evaluation)

POND SIZE:

LENGTH - Approx. 600 m (Estimated from aerial photo)
WIDTH - 40 - 50 m (Estimated from aerial photo)
DEPTH - Ave.= 1 - 2 ft Max.= 2 - 4 ft

WATER SOURCE: Terrace trib. and springs

FISH ACCESS & CURRENT USE: Coho are known to currently use at least the lower reaches of this pond system.

TYPE & AMOUNT OF IN POND COVER: One half to two thirds of the pond surface area is in saw grass. Some logs and woody debris are also present. Most areas of open water appear to have aquatic vegetation growing on the bottom.

COMMENTS: This relatively large pond (which has previously been referred to as Morrison's Pond) might be viewed as two consecutive ponds separated by a beaver dam. Both the upper and lower pond have two lobes. About one third of the surface area of the downstream lobe of the lower pond is open water (depth 2 - 3 ft). The remaining two thirds is shallow water (8-16") with saw grass. The upstream lobe of the lower pond is all shallow water (8-16") and saw grass. An active 2 - 3 ft beaver dam separates the upper and lower pond areas. The elevation of the water surface is 2 - 3 ft higher on the upstream side of the dam. The dam appears to restrict access to the upper pond and to the upper reaches of CW-R2-02 but is probably passable during freshets. Above the dam is the downstream lobe of the upper pond. The lower half of this lobe is deep, open water (depth 3 - 4 ft) while the remainder is shallow and grown up in saw grass. The upper lobe of the upper pond is actually formed by another small beaver pond. This lobe is mostly open water to a depth of 18 to 24 inches with scattered stumps, hillocks and logs throughout.

SITE NUMBER: CW-R2-02
LOCAL NAME: Morrison
RIVER SYSTEM: Clearwater
(Upper Pond)

POND DATA SUPPLEMENT

DATE: 4/21/88

INLET **OUTLET**

DISSOLVED OXYGEN: (Not taken this date. See subsequent evaluation)

WATER TEMPERATURE: (Not taken this date. See subsequent evaluation)

POND SIZE:

LENGTH - Approx. 115 m (Estimated from aerial photo)
WIDTH - 50 - 60 m (Estimated from aerial photo)
DEPTH - 1-2 ft (high water mark is 9" higher than present)

WATER SOURCE: Terrace trib.

FISH ACCESS & CURRENT USE: Current fish use is unknown. Numerous small beaver dams and debris jams downstream of the pond may block access.

TYPE & AMOUNT OF IN POND COVER: Good amounts of woody debris and aquatic vegetation.

COMMENTS: This pond is at the uppermost end of the useable habitat in channel CW-R2-02. It appears to have been formed by the damming effect of an old logging road. It has mostly open water with numerous stumps, logs and other woody debris.

DATE: 5/12/88 & 5/18/88 **OBSERVER:** Nettnin, Young

D.O. samples were taken at three separate sites along channel CW-R2-02 (Morrison) on these dates. The results are reported below.

Site #1: Outlet of upper pond.

Date: 5-12-88
Water Temp: 64 F
D.O. : 8.5 mg/l

Site #2: Outlet of main pond (Morrison pond)

Date: 5-12-88
Water Temp: 58 F
D.O. : 9.0 mg/l

Site #3: Mouth of channel (i.e. at the river)

Date: 5-18-88
Water Temp: 54 F
D.O. : 9.0 mg/l

DATE: 12-5-88 **OBSERVER:** Nettnin, Young

Electroshocked at various sites along the middle reaches of the channel (see map). Results are listed below:

Area	Effort (Sec.)	Results
1.) Channel between main pond and 1st beaver dam (about 150 to 200 meters below dam).	136	No fish. Wide, grassy channel. Difficult to fish.
2.) North bank of main pond.	162	Caught 1 coho.
3.) Just downstream of main beaver dam.	93	Caught 1 coho.
4.) Lower end of beaver pond (i.e. just upstream of dam and along the lower L.B.).	142	No fish. This was a difficult area to shock effectively.
5.) Upper end of beaver pond near fork in channel.	129	No fish. Good habitat.
6.) Right channel above main beaver dam.	44	No fish. Good habitat.

Note: Electroshocking with a backpack shocker does not seem to work very well in this type of pond habitat. May need to come up with another method to determine extent of fish usage in the mid and upper reaches of the channel.

DATE: 12/27/88 **OBSERVER:** Nettnin

D.O. reading was taken near the large beaver dam at 1100 hrs. Air temp. was 41 F at the time and water temp. was 38 F. Dissolved oxygen concentration was at 8 mg/l of water. Flow over the beaver dam was estimated at < 0.25 cfs.

Minnow traps were also set near the dam. Trap #1 was placed approx. 20 m downstream of the dam. The trap was set in a 2 ft wide channel through the sedge grass in water that was less than 2 ft deep. Trap #2 was set about 3 m above the dam along the left bank of the channel. It was situated near a log in about 2 ft of water. Both traps were baited with salmon egg cluster.

DATE: 1/3/89 **OBSERVER:** Nettnin

Checked minnow traps that were set on 12/27/88 (see above). Trap #1 caught 15 juvenile coho including one that had been branded with a "T". Trap #2 was empty.

Both traps were reset at sites above the dam. Trap #1 was set along the right bank of the pond about 15 m upstream of the dam. It was placed under some LOD in about 3 ft of water. Trap #2 was set along the right bank about 30 m upstream of the dam. It was placed near sedge and brush cover in about 3 ft of water. Both traps were baited with individual Pautzke's Fireball salmon eggs which were placed loose in the trap.

DATE: 1/6/89 **OBSERVER:** Nettnin

Checked minnow traps that were set on 1/3/89 (see above). Trap #1 was empty. Trap #2 caught 1 coho pre-smolt. Traps were not reset.

DATE: 2/15/89 **OBSERVER:** Nettnin

Set a minnow trap just downstream of a 5 ft high beaver dam in the mid to upper reaches of the channel (see attached map). This site was upstream of several smaller dams. Trap was baited with salmon roe.

DATE: 2/16/89 **OBSERVER:** Nettnin

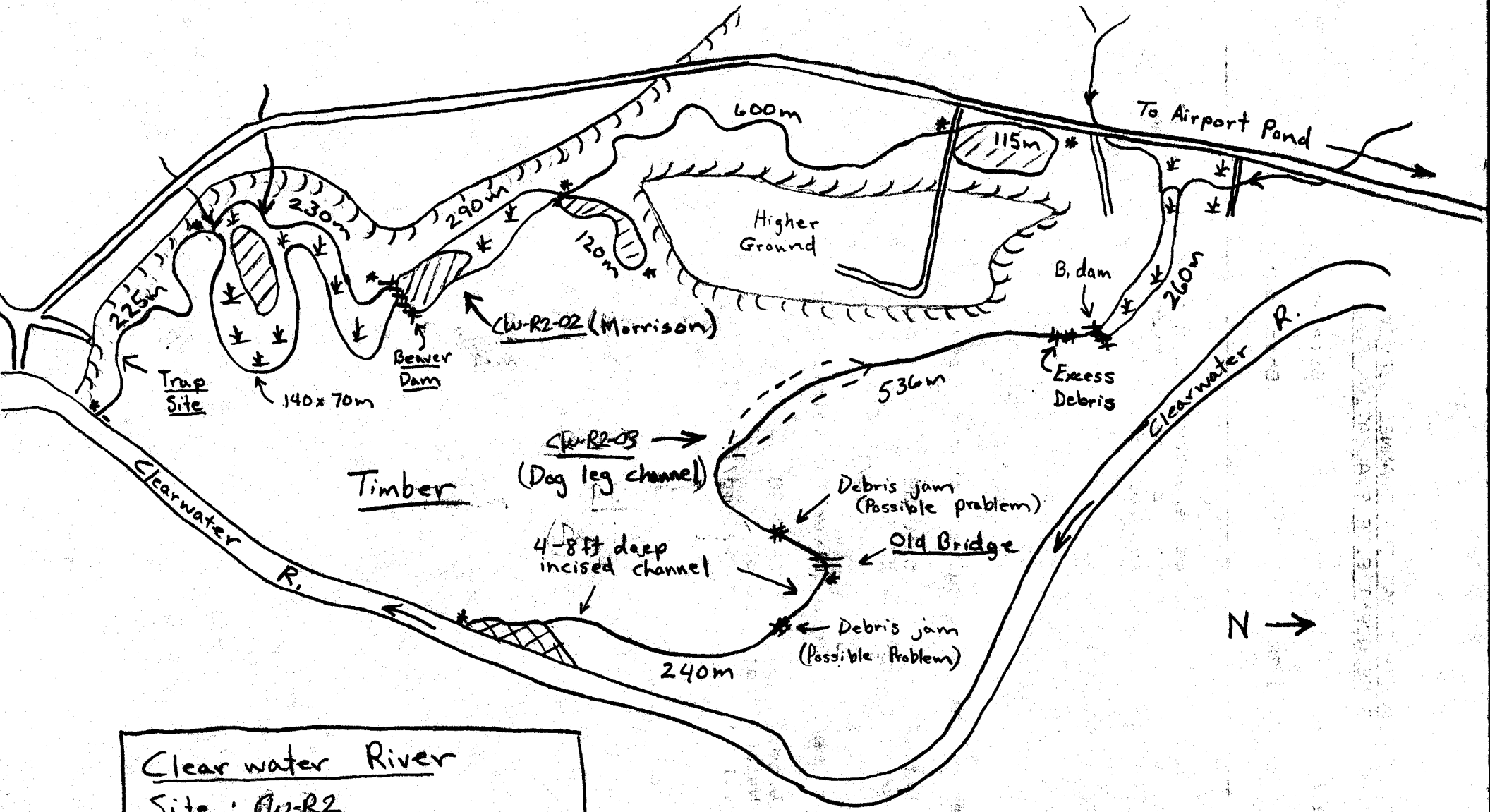
Fished trap that was set 2-15-89 (see above). Trap had fished just over 24 hours. Caught 1 coho about 90 mm in length.

DATE: 8/28/89 **OBSERVER:** Nettnin

It has been rather cool and damp so far this summer. A sub- stantial rainfall (> 1 inch) has occurred during the last week. Air temp. at the time of these observations was 67 F.

There is about 9 inches of water in the open water portion of the main pond. The water temp here was 69F.

There is still about 2 ft of water in the upper pond area. Water temp in the upper pond was 64 F.



Clear water River

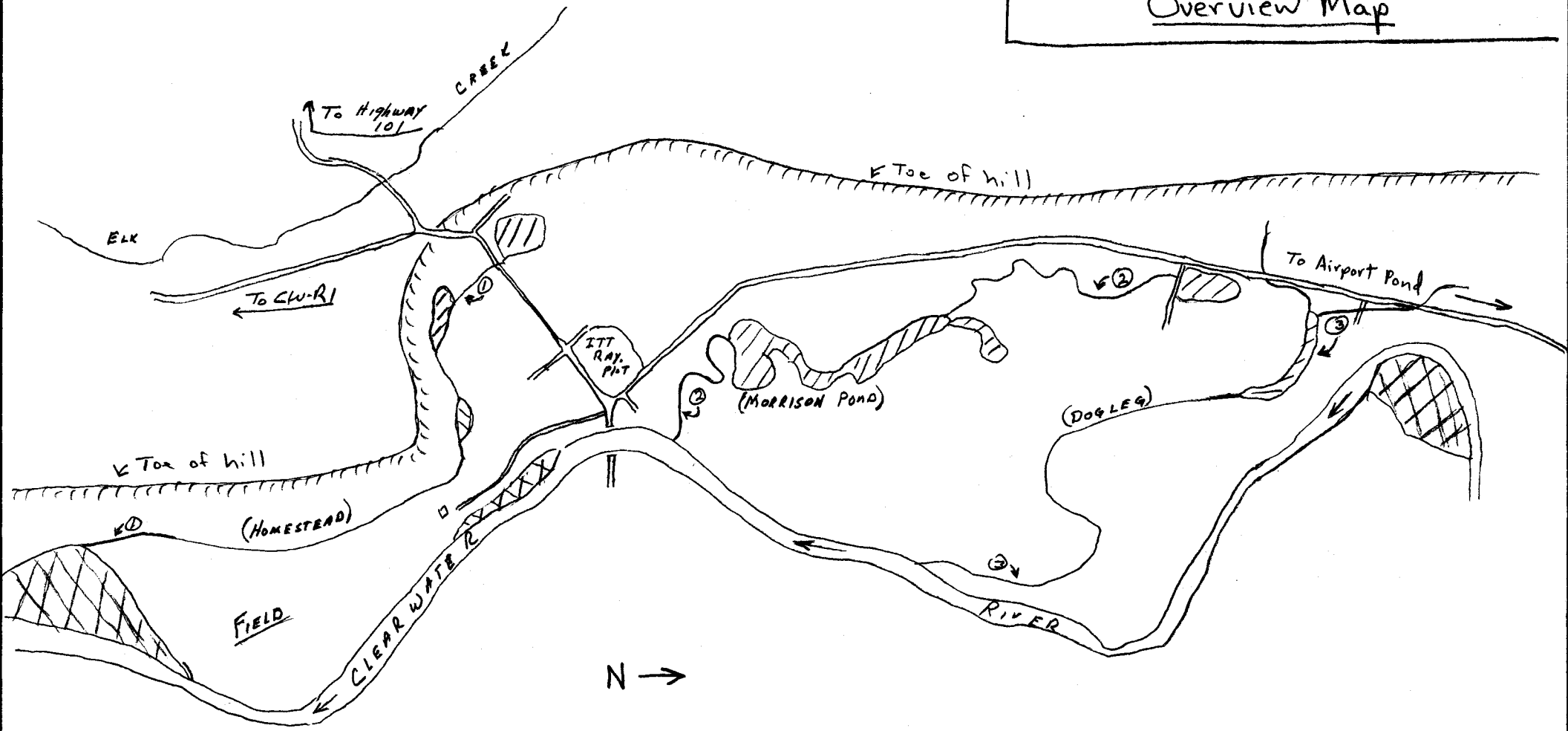
Site: CW-R2

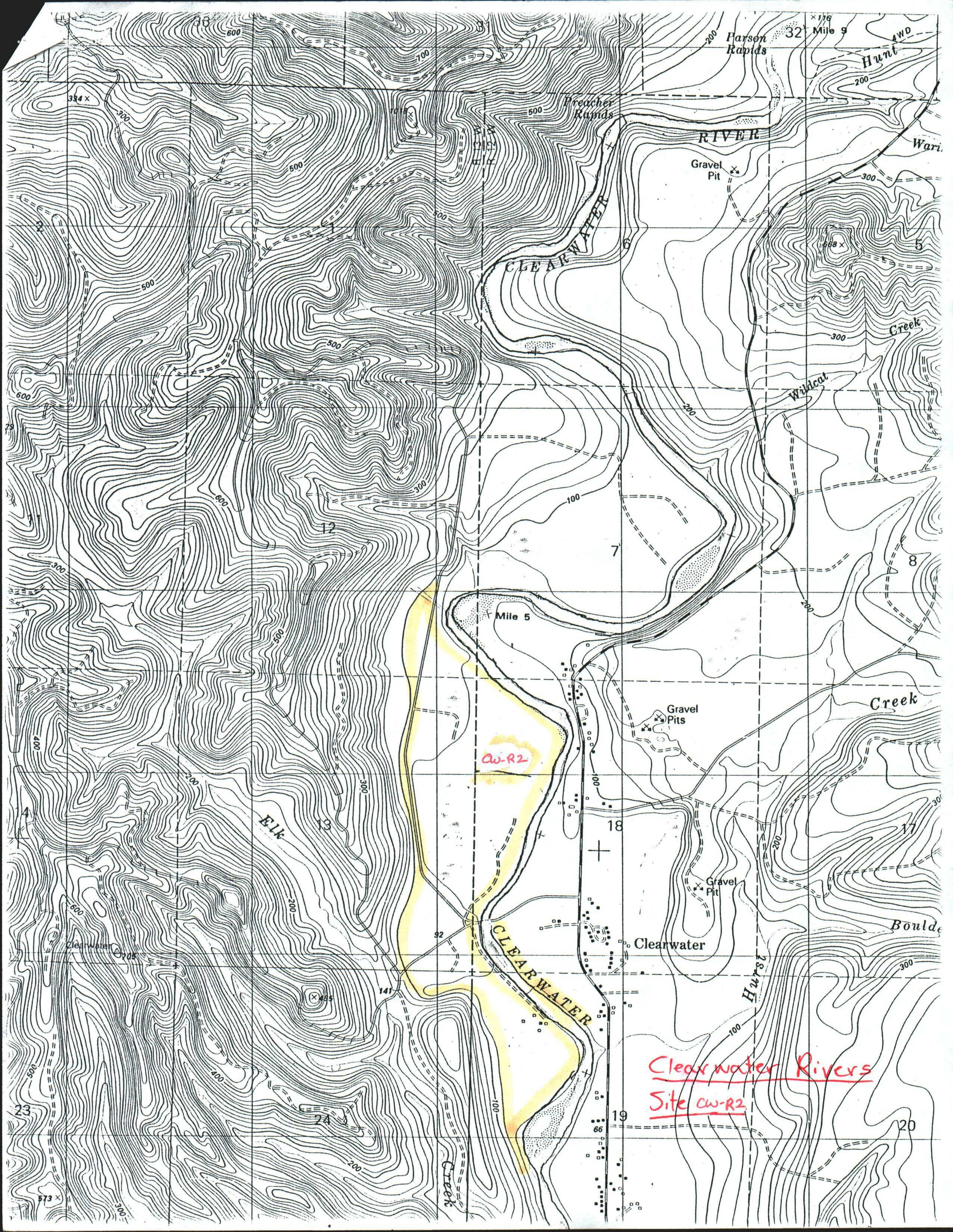
Channel CW-R2-02 (Morrison)

Channel CW-R2-03 (Dog leg)

Clearwater River Site: CW-R2-2

Overview Map




Parson Rapids
Preacher Rapids
CLEARWATER RIVER
Gravel Pit
Hunt
Wildcat Creek
Mile 5
Mile 9
Gravel Pits
Creek
CW-R2
Elk Creek
Clearwater
CLEARWATER
Hurst
Boulde
Clearwater Rivers
Site CW-R2